Table of Contents

17B2302Q

Getting Started

Introduction 1
Safety 1
Description of Controls 2-3
Setting Up Guide . . . . . Foldout

How to use the On Screen Display

Front Panel Controls
- Contrast 4
- Brightness 4
- Volume 5

Main Menu
- Mute 5
- Degauss 6
- Monitor Status 6

Main Menu / Advanced Controls Window
- Power Saving 7
- Language 7
- DDC1 / 2B 8
- OSD Timer 8
- Moire 9
- Sync Input Select 9

Main Menu / Color Temperature Window
- 9300˚ K 10
- 6500˚ K 10
- User 1 11
- User 2 11

Main Menu / Geometry Window
- Rotation 12
- Pincushion 12
- Trapezoid 12
- Balanced Pincushion 12
- Parallelogram 12

Main Menu / Size & Position Window
- Zoom 13
- Horizontal Position 13
- Horizontal Size 13
- Vertical Position 14
- Vertical Size 14

Main Menu / Save & Cancel 15

Main Menu / Exit OSD & Reset 15

Additional Information

Audio & USB Set Ups 16
Power Saving Feature 17
Glossary 17
Pin Assignment 18
Specifications 18
Index 18
Troubleshooting 19
Warranty (Appendix) 60

Other language versions

FRENCH (FRANCAIS) 20

SPANISH (ESPAÑOL) 40

APPENDIX

English	Information for Users in the U.S.	A1
	Declaration FCC	A2
	Energy Declaration	A3
	TCO'95	A4-A5
Deutsch	Hinweis / GS /ACHTUNG	A6
Francais	Declaration FCC	A7

Because of continuous product improvements,
the information mentioned in this document is subject to change without notice.

Introduction and Safety

Introduction

The Philips 107MB color monitor displays sharp and brilliant images of text and graphics with a maximum resolution of 1280x1024 pixels. It is optimal for Windows, CAD / CAM / CAE, desktop publishing, spread sheets, multi-media, and any other application that demands a large screen size and high resolutions.

The monitor automatically scans horizontal frequencies from 30KHz to 86KHz, and vertical frequencies from 50Hz to 160Hz. With microprocessor-based digital-controlled circuitry and On Screen Display (OSD) controls, the monitor can automatically adjust itself to the video card's scanning frequency and can display an image with the precise parameters you desire.

Features

• An anti-glare, anti-static, anti-reflection, high-contrast screen coating eliminates any bad effects caused by room light reflecting on and dust attracted to the screen's surface.

• With the Color Adjustment feature, you can easily choose different preset color temperatures or set your own customized color parameters.

• The Image Tilt Adjustment feature corrects a rotated image. This adjustment compensates for the distortions caused by elements such as the Earth's magnetic field.

• The full-size feature expands the image on the monitor to fill the screen when used in factory preset modes.

• Optional USB Connector at the back of the monitor is prepared for the Universal Serial Bus hub. You can easily and flexibly connect USB-designed devices – such as a mouse or keyboard – to the monitor for true Plug-and-Play function. The USB hub is an accessory that may be purchased from you local Philips dealer.

• Green Design – including automatic power saving function (NUTEK) and low-emission compliance (optional TCO '95) – shows your commitment to the environment.

• DDC1 / DDC2B allows communication between the monitor and the PC for optimal video configuration.

• Moire Cancellation eliminates diffraction, a fringe pattern in the picture.

Note: Your monitor operates according to the VESA-standard DDC level 1 / 2B. Only computers that support the same guidelines and operate at an equal or higher level can use this feature. If your computer does not support the relevant guidelines, you can still use your monitor and computer. However, you may need to manually specify the appropriate resolution in the computer.

As an Energy Star Partner, PHILIPS has determined that this product meets the Energy Star guidelines for energy efficiency.

Contact us at our web site: http://www.monitors.be.philips.com

Safety precautions and maintenance

• Unplug the monitor, if you are not going to use it for an extended period of time.

• Unplug the monitor, if you need to clean it with a slightly damp cloth. Wiping the screen with a dry cloth is okay when the power is disconnected. However, never use alcohol or ammonia-based liquids.

• Consult a service technician if the monitor does not operate normally when following the instructions in this manual.

• The back cover should be removed only by qualified service personnel.

• Keep the monitor out of direct sunlight and away from stoves or any other heat source.

• The top of the monitor is not a shelf. Remove any object that could fall into the vents or prevent proper cooling of the monitor's electronics.

• Keep the monitor dry. To avoid electric shock, do not expose it to rain or excessive moisture.

• Keep the monitor away from magnetic objects, such as speakers, electric motors, transformers, etc.

• When positioning the monitor, make sure the power plug and outlet are easily accessible.

End-of-life disposal

Your new monitor contains materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and to minimize the amount to be disposed of.

Please find out about the local regulations on how to dispose of your old monitor.

ENERGY STAR is an U.S. registered mark.
IBM, IBM PC, and Power PC are registered trademarks of International Business Machines Corporation.
Apple, Macintosh, Quadra, Performa, and Centris are registered trademarks of Apple Computer, Inc.

Description of Controls

Volume Button – Press the button to adjust the sound from the speakers.

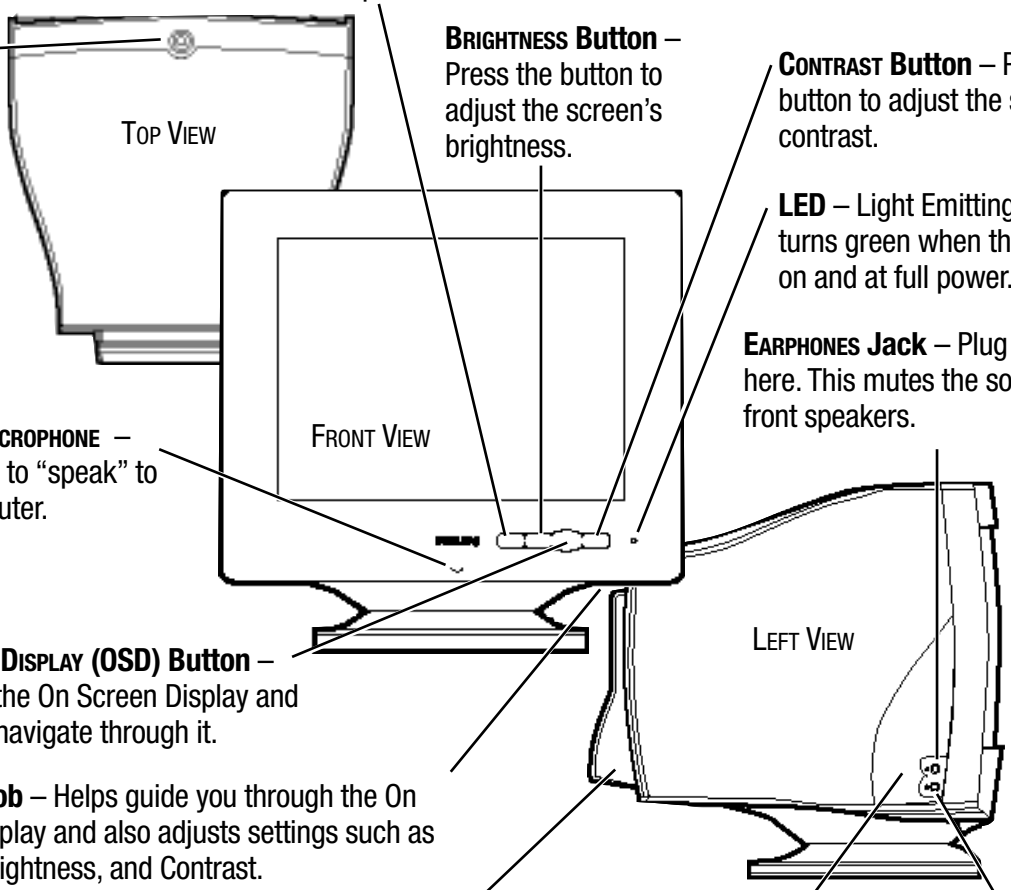
Power Button – Turns the electricity On and Off.

Brightness Button – Press the button to adjust the screen's brightness.

Contrast Button – Press this button to adjust the screen's contrast.

LED – Light Emitting Diode turns green when the monitor is on and at full power.

Earphones Jack – Plug in earphones here. This mutes the sound from the front speakers.



Built-in Microphone – Allows you to "speak" to your computer.

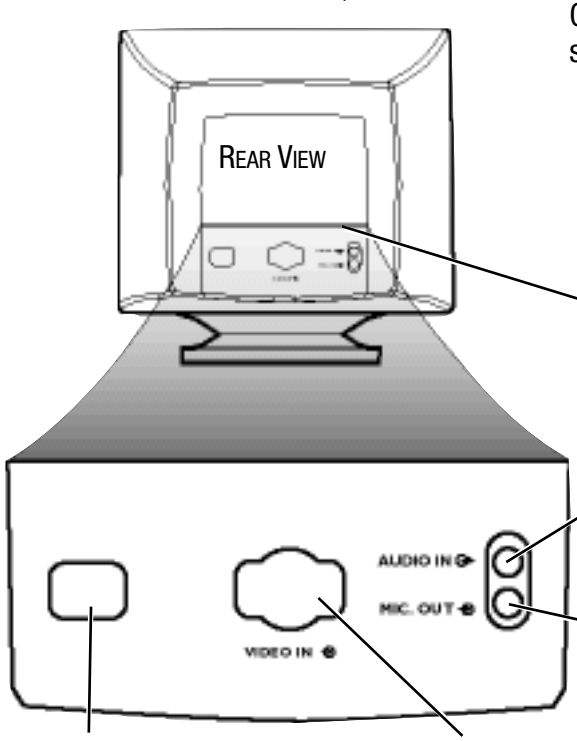
On Screen Display (OSD) Button – Brings up the On Screen Display and helps you navigate through it.

Rotary Knob – Helps guide you through the On Screen Display and also adjusts settings such as Volume, Brightness, and Contrast.

Cable Cover – Snaps onto the back of the monitor to conceal cable connections. (Cable connections in the manual are shown without the cover on.)

Speakers – Transmit sounds from your computer or amplifier. One speaker on each side of the monitor.

Microphone Jack – Plug in a microphone to transmit sound through the side speakers or to the computer. See page 16.



USB Connector (under the edge, optional) – Slot for plugging in the USB Hub-optional hardware that allows true Plug-and-Play. For details, see page 16.

Audio in Jack – Connect the supplied audio cable to send sound from a computer or amplifier to the monitor's speakers.

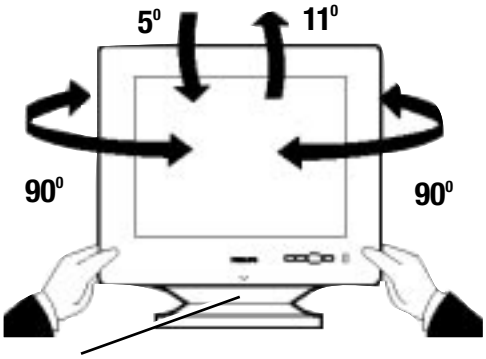
Microphone out Jack – Connect the supplied microphone cable to transmit sound from the monitor to a computer or amplifier.

Power Plug – Plug the power cord in here. See foldout for details.

Video in Jack – One end of the cable is already connected here. The other end connects to the computer. See foldout for details.

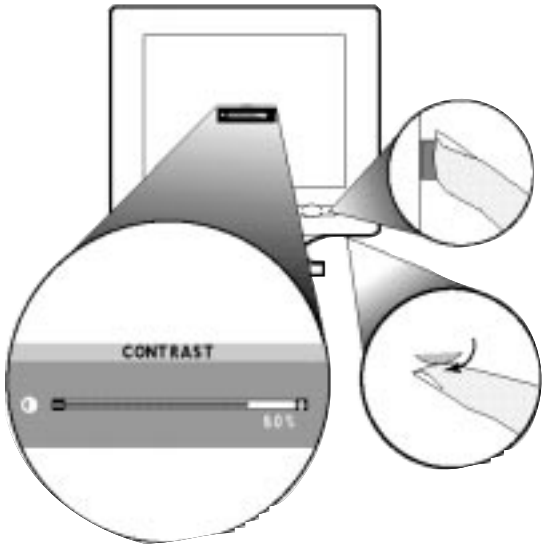
Description of Controls

PEDESTAL



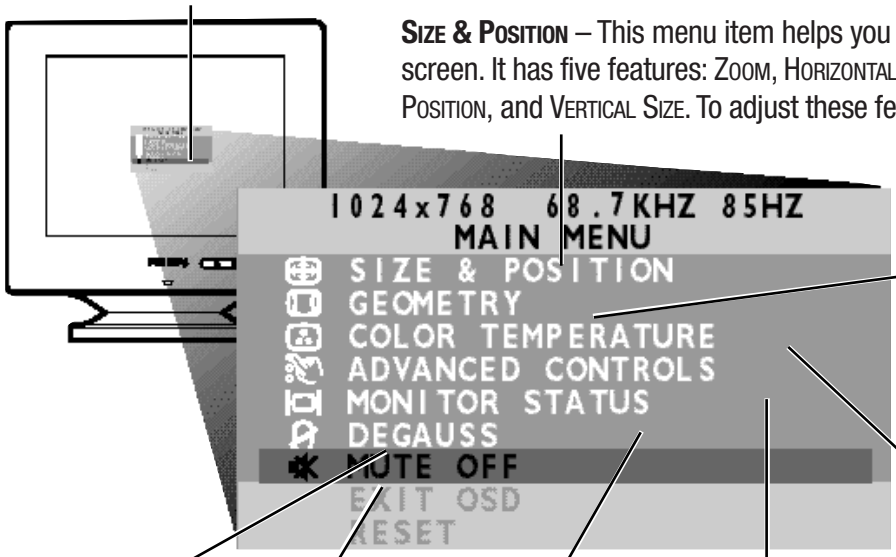
Pedestal – With the built-in pedestal, you can tilt and swivel the monitor to the most comfortable viewing angle. To best use your monitor, always place it at eye level.

FRONT PANEL BUTTONS / ROTARY KNOB



Using the front panel buttons – Select one of the four front panel buttons, then use the Rotary knob to make the adjustment or select an additional feature. To adjust a particular feature, see the page for that feature. *For example, Contrast is on page 4.*

On Screen Display – Your monitor is preset at the factory. However, you can adjust it using the On Screen Display button and the Rotary knob described on page 2. The way to do so is through the On Screen Display (OSD). Below is a brief description of the seven On Screen Display windows.



Size & Position – This menu item helps you maximize the position of your screen. It has five features: Zoom, Horizontal Position, Horizontal Size, Vertical Position, and Vertical Size. To adjust these features, turn to pages 13 - 14.

Geometry Controls – This menu item has five features: Pincushion, Balanced Pincushion, Trapezoid, Parallelogram, and Rotation. To adjust these features, turn to page 12.

Degauss – Demagnetizes your screen. If color splotches or impurities appear on your screen, you may want to try this. For details, see page 6.

Mute – Turns the sound from your speakers On or Off. Mute Off is the default. For details, see page 5.

Monitor Status – Lists the current vertical and horizontal scanning frequencies and tells you the serial number of the monitor. For details, see page 6.

Advanced Controls – This menu item has six features: Power Saving, Language, DDC1 / 2B, OSD Timer, Moire, and Sync Input Select. To adjust these features, turn to pages 7 - 9. *Note: Language allows you to change the On Screen Display from English to French, Spanish, German, or Italian. See page 7 for details.*

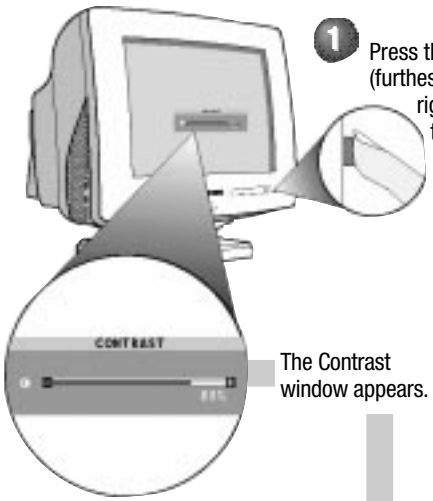
Color Temperature – Select the temperature setting for the best color for your work. You can even customize your color settings. There are four selections: 9300˚ K, 6500˚ K, User 1, and User 2. For details, turn to pages 10 - 11.

How to Use the On Screen Display (OSD)

Front Panel Controls

Contrast

To adjust your screen's contrast, follow the steps below. Contrast is the difference between the light and dark areas on the screen. A 100% contrast level is recommended.



1. Press the Contrast button (furthest one on the right) on the front of the monitor.
2. The Contrast window appears.
3. Turn the Rotary knob (at the lower right-hand corner of the monitor) to adjust the contrast.

4. When finished, press the Contrast button again. The Contrast screen disappears.

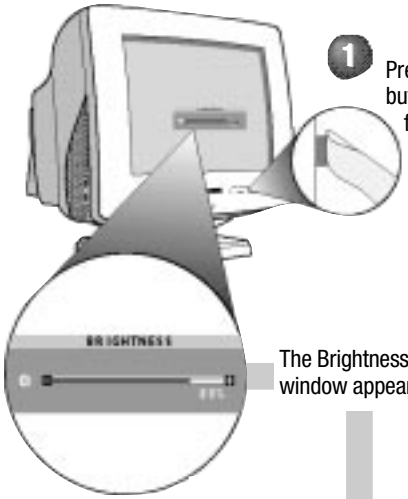
Smart Help

To continue to Brightness, press the Brightness button on the front of the monitor. Next, follow steps 2 - 3 under Brightness.

If you do not press the Contrast button a second time, the Contrast window will "time out" (disappear) after five seconds. You can change this time. See page 8 for time out options.

Brightness

To adjust your screen's brightness, follow the steps below. Brightness is the overall intensity of the light coming from the screen. A 50% brightness level is recommended.



1. Press the Brightness button (second one from the left) on the front of the monitor.
2. The Brightness window appears.
3. Turn the Rotary knob (at the lower right-hand corner of the monitor) to adjust the brightness.

4. When finished, press the Brightness button again. The Brightness screen disappears .

Smart Help

To continue to Volume, press the Volume button on the front of the monitor. Next, follow steps 2 - 3 under Volume.

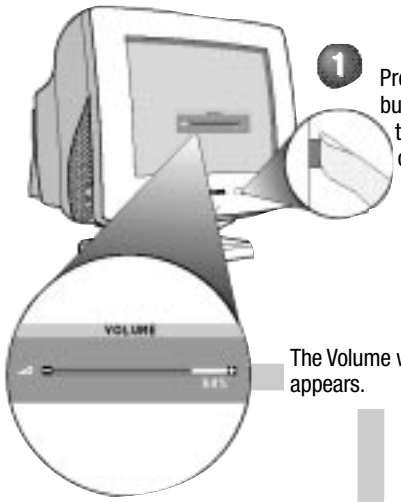
If you do not press the Brightness button a second time, the Contrast window will "time out" (disappear) after five seconds. You can change this time. See page 8 for time out options.

How to Use the On Screen Display (OSD)

Front Panel Control / Main Menu

Volume

To adjust your monitor's volume, follow the steps below. The volume control adjusts the sound from the two front-mounted speakers or the earphones jack.



1. Press the Volume button (first one from the left) on the front of the monitor.
2. The Volume window appears.
3. Turn the Rotary knob (at the lower right-hand corner of the monitor) to adjust the volume.
4. When finished, press the Volume button again. The Volume screen disappears .

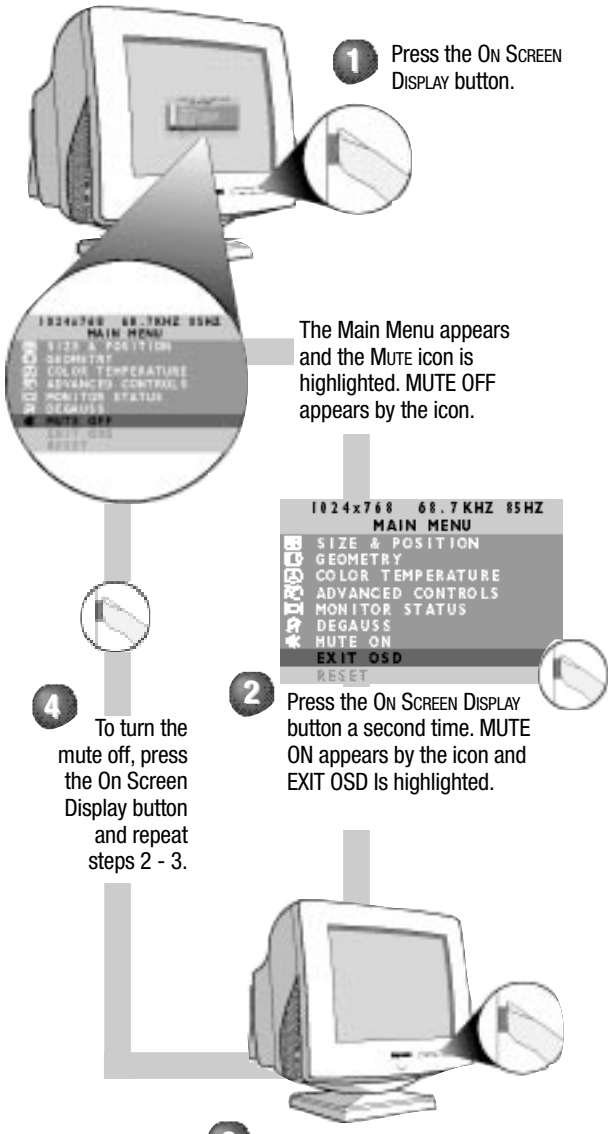
Smart Help

After Volume Window has disappeared, to continue to the Main Menu, press the larger OSD (On Screen Display) button between the Brightness and Contrast buttons. Next, follow steps 2 - 3 under Mute.

If you do not press the Volume button a second time, the Volume window will "time out" (disappear) after five seconds. You can change this time. See page 8 for time out options.

Mute

To completely turn off the volume (but still return to the former level), follow the steps below. The mute control turns off the sound from the two front-mounted speakers or the earphones jack. *Note: audio is muted from monitor speakers when earphones are connected. See pages 2 and 16 for details.*



1. Press the On Screen Display button.
2. The Main Menu appears and the Mute icon is highlighted. MUTE OFF appears by the icon.
3. Press the On Screen Display button a second time. MUTE ON appears by the icon and EXIT OSD Is highlighted.
4. To turn the mute off, press the On Screen Display button and repeat steps 2 - 3.
5. Press the On Screen Display (OSD) button a third time to exit the OSD.

Smart Help

To go to Degauss . . .

. . . instead of pressing the On Screen Display (OSD) button a third time, turn the Rotary knob until Degauss is highlighted. Next, press the OSD button. Turn to the next page and follow steps 2 - 3.

. . . once you have exited the OSD, press the OSD button and turn the Rotary knob until Degauss is highlighted. Next, press the OSD button. Turn to the next page and follow steps 2 - 3.

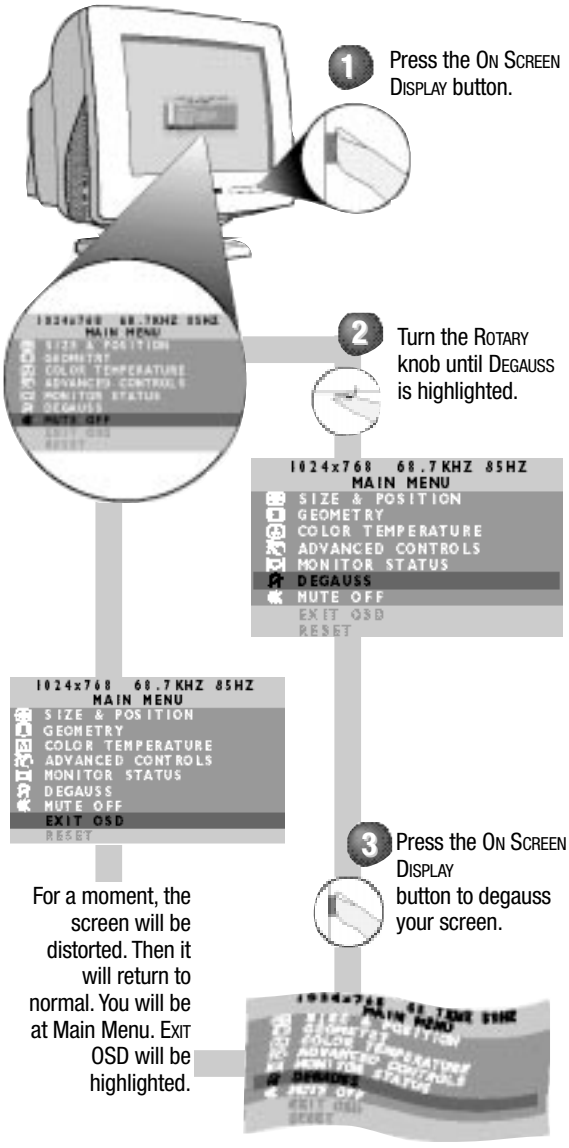
If you do not press the OSD button a third time, the OSD window will "time out" (disappear) after five seconds. You can change this time. See page 8 for time out options.

How to Use the On Screen Display (OSD)

Main Menu windows

Degauss

Degaussing removes electromagnetic build up that may distort the color on your screen. To degauss your screen, follow the steps below.


1 Press the On Screen Display button.
2 Turn the Rotary knob until Degauss is highlighted.
1024x768 68.7KHZ 85HZ
MAIN MENU
SIZE & POSITION
GEOMETRY
COLOR TEMPERATURE
ADVANCED CONTROLS
MONITOR STATUS
DEGAUSS
MUTE OFF
EXIT OSD
RESET
3 Press the On Screen Display button to degauss your screen.
For a moment, the screen will be distorted. Then it will return to normal. You will be at Main Menu. Exit OSD will be highlighted.

Smart Help

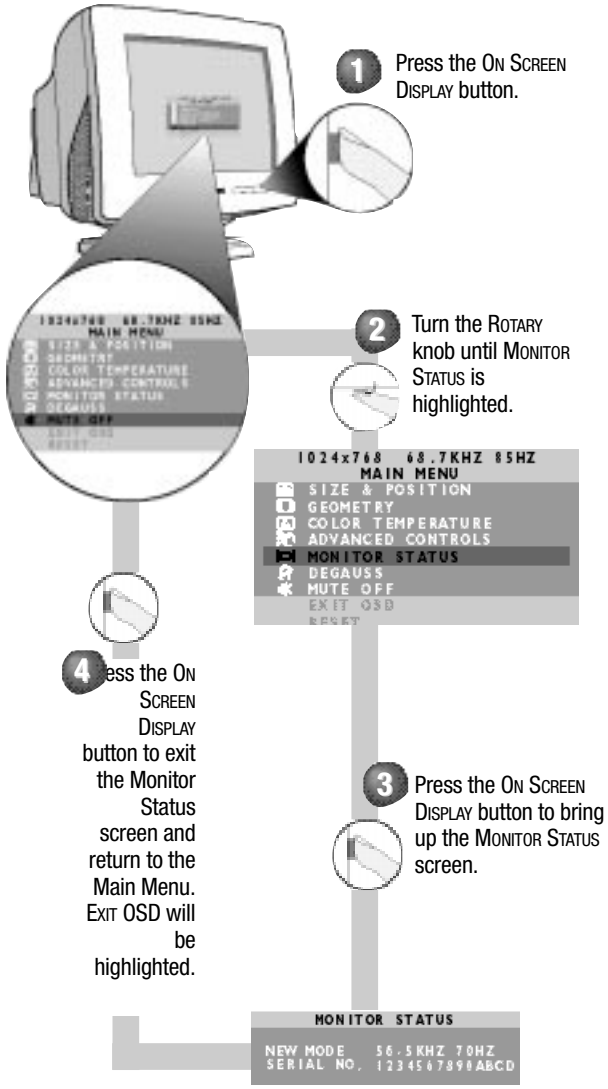
After returning to the Main Menu . . .

. . . to continue to Monitor Status, turn the Rotary knob until Monitor Status is highlighted. Next, follow steps 2 - 3 under Monitor Status in the next column.

. . . to exit completely, press the OSD button.

Monitor Status

Monitor Status tells you the vertical and horizontal scanning frequencies that your computer is using to operate your monitor. It also tells you the serial number of your monitor. *Note: This screen is for review only.*


1 Press the On Screen Display button.
2 Turn the Rotary knob until Monitor Status is highlighted.
1024x768 68.7KHZ 85HZ
MAIN MENU
SIZE & POSITION
GEOMETRY
COLOR TEMPERATURE
ADVANCED CONTROLS
MONITOR STATUS
DEGAUSS
MUTE OFF
EXIT OSD
RESET
4 ess the On Screen Display button to exit the Monitor Status screen and return to the Main Menu. Exit OSD will be highlighted.
3 Press the On Screen Display button to bring up the Monitor Status screen.
MONITOR STATUS
NEW MODE 56.5KHZ 70HZ
SERIAL NO. 1234567890ABCD

Smart Help

After returning to the Main Menu . . .

. . . to continue to Advanced Controls, turn the Rotary knob until Advanced Controls is highlighted. Next, follow steps 2 - 3 under Advanced Controls on the next page.

. . . to exit completely, press the OSD button.

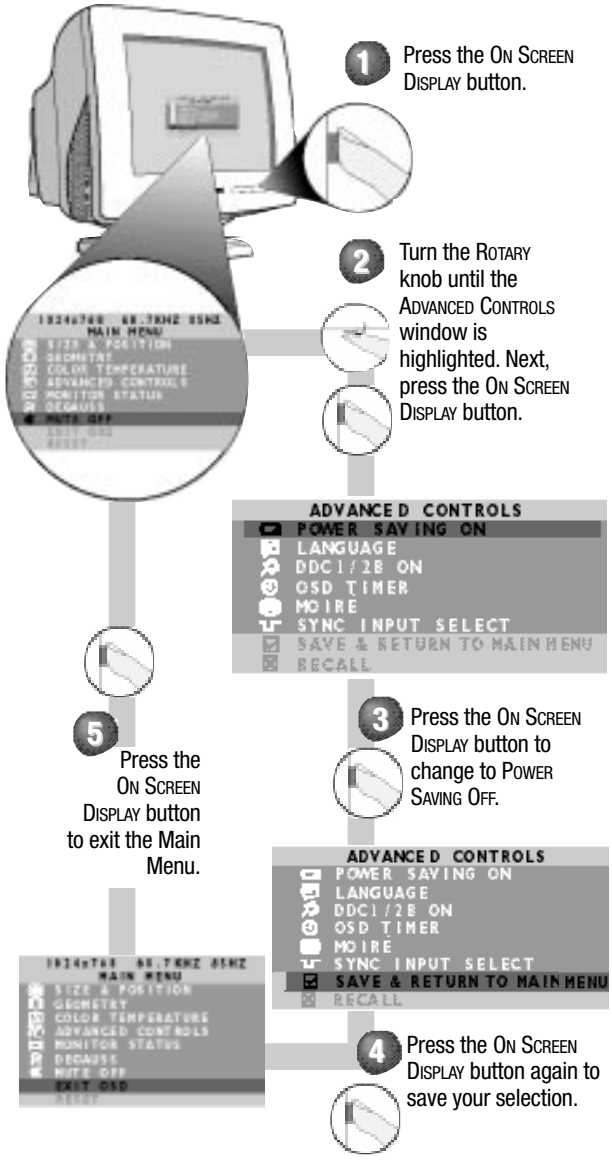
Note: Neither the scanning frequencies nor the serial number can be changed at this screen. The scanning frequencies are established by your computer. They also appear at the top of the Main Menu screen. The serial number is entered at the factory.

How to Use the On Screen Display (OSD)

Advanced Controls window

Power Saving

Power Saving helps save energy when the monitor is on but not being used. After a preset time, the monitor will go blank if not being used. **"Power Saving On"** is the default setting. To turn Power Saving Off, follow the steps below.


1 Press the On Screen Display button.
2 Turn the Rotary knob until the Advanced Controls window is highlighted. Next, press the On Screen Display button.
ADVANCED CONTROLS
POWER SAVING ON
LANGUAGE
DDC1/2B ON
OSD TIMER
MOIRE
SYNC INPUT SELECT
SAVE & RETURN TO MAIN MENU
RECALL
3 Press the On Screen Display button to change to Power Saving Off.
5 Press the On Screen Display button to exit the Main Menu.
4 Press the On Screen Display button again to save your selection.

Smart Help

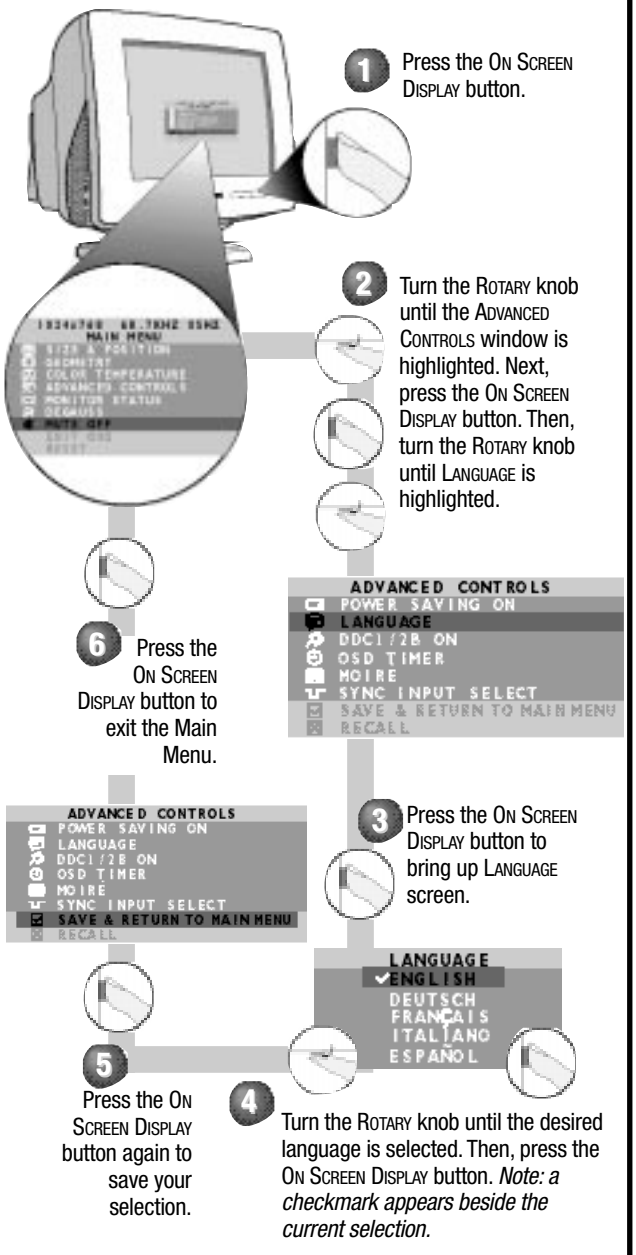
To make other changes in the Advanced Controls window . . .

. . . after returning to Advanced Controls window [but before pressing the On Screen Display (OSD) button in step 4], turn the Rotary knob until another feature – for example, Language – is highlighted. Next, follow steps 2 - 6 under Language.

. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, Language.

Language

The On Screen Display shows its settings in one of five languages. The default is English, but you can select French, Spanish, German, or Italian. To select Language, follow the steps below.


1 Press the On Screen Display button.
2 Turn the Rotary knob until the Advanced Controls window is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob until Language is highlighted.
ADVANCED CONTROLS
POWER SAVING ON
LANGUAGE
DDC1/2B ON
OSD TIMER
MOIRE
SYNC INPUT SELECT
SAVE & RETURN TO MAIN MENU
RECALL
6 Press the On Screen Display button to exit the Main Menu.
3 Press the On Screen Display button to bring up Language screen.
LANGUAGE
ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO
ESPAÑOL
5 Press the On Screen Display button again to save your selection.
4 Turn the Rotary knob until the desired language is selected. Then, press the On Screen Display button. Note: a checkmark appears beside the current selection.

Smart Help

To make other changes in the Advanced Controls window . . .

. . . after returning to Advanced Controls window [but before pressing the On Screen Display (OSD) button in step 5], turn the Rotary knob until another feature – for example, DDC1 / 2B – is highlighted. Next, turn to the next page and follow steps 2 - 5 under DDC1 / 2B.

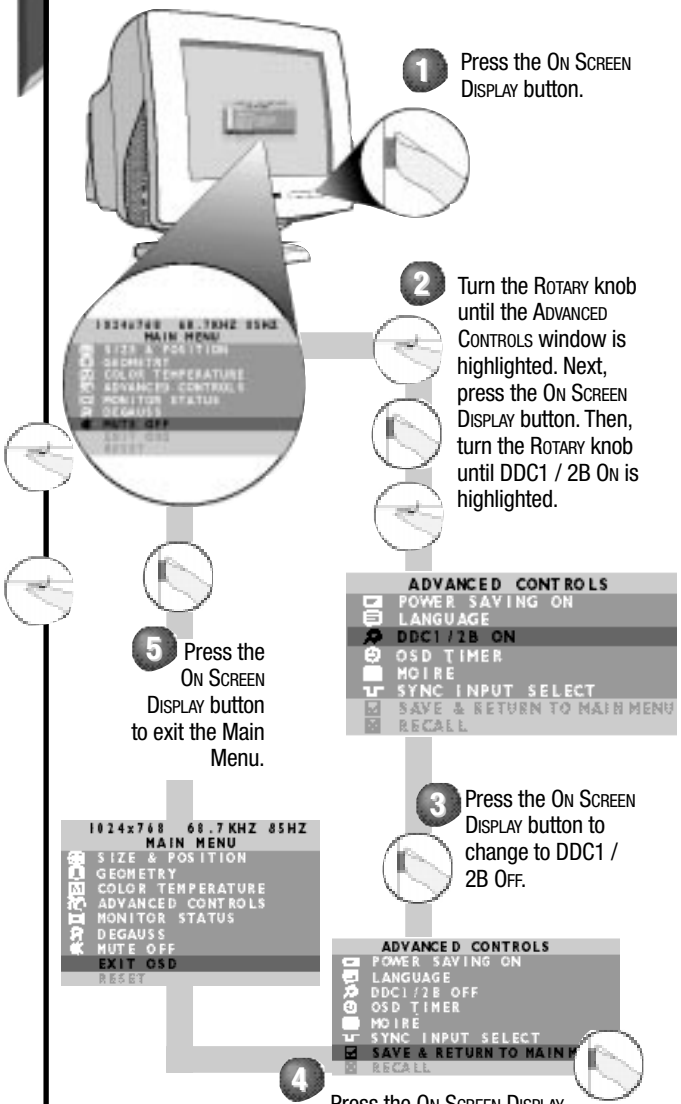
. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, DDC1 / 2B.

How to Use the On Screen Display (OSD)

Advanced Controls window

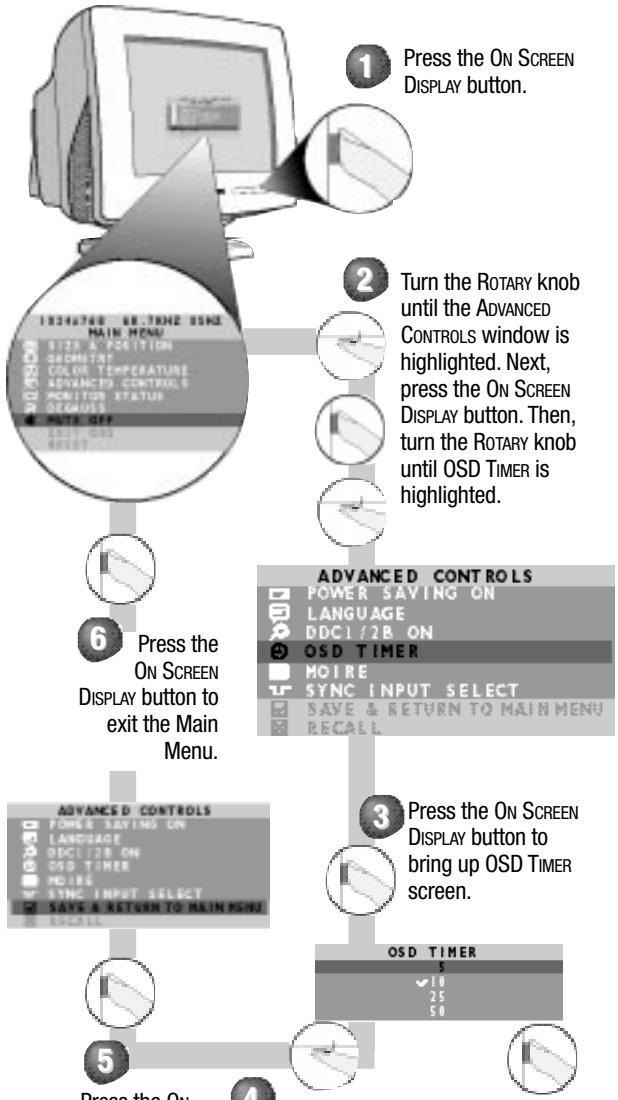
DDC1 / 2B

Many newer computers have DDC technology that this monitor takes advantage of to provide you better picture quality. ***"DDC1 / 2B On"*** is the default setting. *If your computer's video card is not DDC compatible, you may experience interference,"noise," or no color on your monitor. If so, try turning this feature off.*


1 Press the On Screen Display button.
2 Turn the Rotary knob until the Advanced Controls window is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob until DDC1 / 2B On is highlighted.
ADVANCED CONTROLS
POWER SAVING ON
LANGUAGE
DDC1/2B ON
OSD TIMER
MOIRE
SYNC INPUT SELECT
SAVE & RETURN TO MAIN MENU
RECALL
3 Press the On Screen Display button to change to DDC1 / 2B Off.
ADVANCED CONTROLS
POWER SAVING ON
LANGUAGE
DDC1/2B OFF
OSD TIMER
MOIRE
SYNC INPUT SELECT
SAVE & RETURN TO MAIN
RECALL
4 Press the On Screen Display button again to save your selection.
5 Press the On Screen Display button to exit the Main Menu.
1024x768 68.7KHZ 85HZ
MAIN MENU
SIZE & POSITION
GEOMETRY
COLOR TEMPERATURE
ADVANCED CONTROLS
MONITOR STATUS
DEGAUSS
MUTE OFF
EXIT OSD
RESET

OSD Timer

With OSD Timer you can set the time for the On Screen Display to time out. Your choices range from 5 to 50 seconds. To select OSD Timer, follow the steps below. *Note: Ten seconds is the default setting.*


1 Press the On Screen Display button.
2 Turn the Rotary knob until the Advanced Controls window is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob until OSD Timer is highlighted.
ADVANCED CONTROLS
POWER SAVING ON
LANGUAGE
DDC1/2B ON
OSD TIMER
MOIRE
SYNC INPUT SELECT
SAVE & RETURN TO MAIN MENU
RECALL
3 Press the On Screen Display button to bring up OSD Timer screen.
OSD TIMER
5
10
25
50
4 Turn the Rotary knob until the desired time out period is selected. Then, press the On Screen Display button. Note: a checkmark appears beside the current OSD timer period.
5 Press the On Screen Display button again to save your selection.
6 Press the On Screen Display button to exit the Main Menu.

Smart Help

To make other changes in the Advanced Controls window . . .

. . . *after returning to Advanced Controls window [but before pressing the On Screen Display (OSD) button in step 4],* turn the Rotary knob until another feature – for example, OSD Timer – is highlighted. Next, follow steps 2 - 6 under OSD Timer.

. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, OSD Timer.

Smart Help

To make other changes in the Advanced Controls window . . .

. . . *after returning to Advanced Controls window [but before pressing the On Screen Display (OSD) button in step 5],* turn the Rotary knob until another feature – for example, Moire – is highlighted. Next, turn to the next page and follow steps 2 - 6 under Moire.

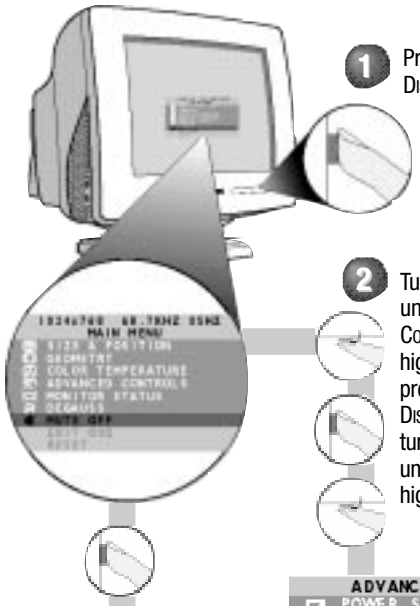
. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, Moire.

How to Use the On Screen Display (OSD)

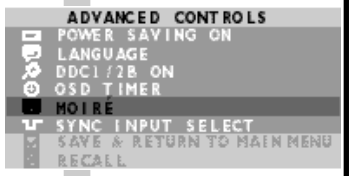
Advanced Controls window

Moire

Moire is a fringe pattern arising from the interference between two superimposed line patterns. To adjust your Moire, follow the steps below. *Note: Use only if necessary. Activating Moire can affect sharpness.*



1. Press the On Screen Display button.
2. Turn the Rotary knob until the Advanced Controls window is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob until Moire is highlighted.



3. Press the On Screen Display button twice to bring up Moire screen and highlight H(orizontal) Moire.

4. Turn the Rotary knob until the desired Horizontal Moire is selected. Then, press the On Screen Display button.
5. To adjust the Vertical Moire, turn the Rotary knob until V(ertical) Moire is highlighted. Then, press the On Screen Display button again and repeat step 4.
6. Once you have made the adjustments, press the On Screen Display button once to save your changes, then again to exit the Advanced Controls window, and a third time to exit the Main Menu.

Smart Help

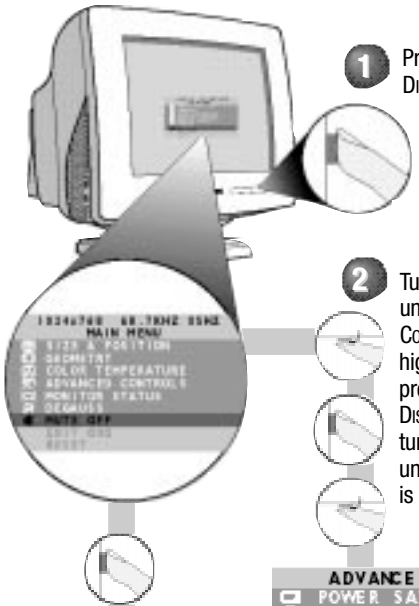
To make other changes in the Advanced Controls window . . .

. . . after returning to Advanced Controls window [but before pressing the On Screen Display (OSD) button a third time in step 6], turn the Rotary knob until another feature – for example, Sync Input Select – is highlighted. Next, follow steps 2 - 6 under Sync Input Select.

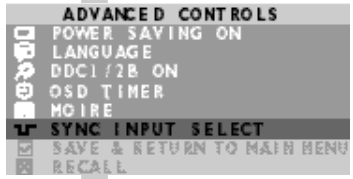
. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, Sync Input Select.

Sync Input Select

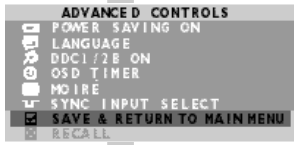
Sync Input Select synchronizes your monitor with the video card in your computer. In most cases you will not need to use this feature. To adjust your Sync Input Select, follow the steps below. *Note: Use only if necessary. If your screen has a greenish cast to it that cannot be adjusted for with the Color Temperature controls on pages 10 and 11, then try this.*



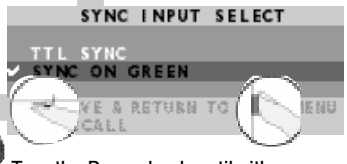
1. Press the On Screen Display button.
2. Turn the Rotary knob until the Advanced Controls window is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob until Sync Input Select is highlighted.



3. Press the On Screen Display button to bring up Sync Input Select screen.



4. Turn the Rotary knob until either TTL Sync or Sync on Green is selected. Then, press the On Screen Display button. *Note: a checkmark appears beside the current Sync Input selected.*



5. Press the On Screen Display button again to save your selection.
6. Press the On Screen Display button to exit the Main Menu.

Smart Help

To make other changes in the Main Menu window . . .

. . . after returning to the Main Menu [but before pressing the On Screen Display (OSD) button in step 6], turn the Rotary knob until another feature – for example, Color Temperature – is highlighted. Next, press the OSD button, turn to the next page and follow steps 2 - 7 under Color Temperature.

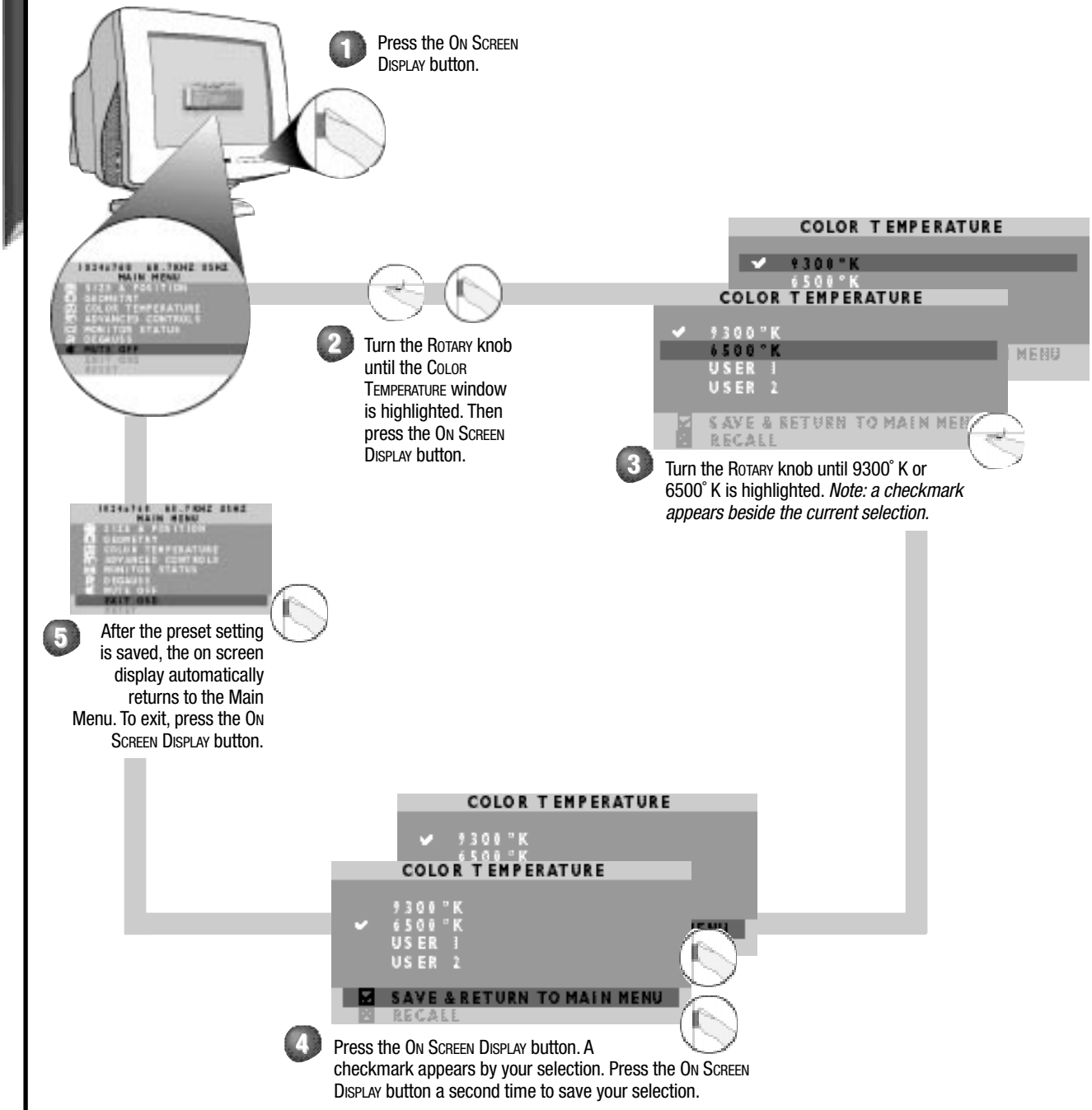
. . . after you have exited completely, press the OSD button and use the Rotary knob to select that feature, for example, Color Temperature.

How to Use the On Screen Display (OSD)

Color Temperature window

9300° K / 6500° K

Your monitor has two preset options you select: 9300° K or 6500° K. Computer Aided Design (CAD) usually works best with the 9300° K setting. Desktop Publishing (DTP) usually works best with the 6500° K setting. The screen will change as you scroll between these two settings. Select the one that works best for you, or set up your own setting under User 1 or User 2 on the next page.


1 Press the On Screen Display button.
2 Turn the Rotary knob until the Color Temperature window is highlighted. Then press the On Screen Display button.
COLOR TEMPERATURE
9300°K
6500°K
USER 1
USER 2
SAVE & RETURN TO MAIN MENU
RECALL
MENU
3 Turn the Rotary knob until 9300° K or 6500° K is highlighted. Note: a checkmark appears beside the current selection.
4 Press the On Screen Display button. A checkmark appears by your selection. Press the On Screen Display button a second time to save your selection.
5 After the preset setting is saved, the on screen display automatically returns to the Main Menu. To exit, press the On Screen Display button.

Smart Help

After returning to Main Menu . . .

. . . to continue to User 1 or User 2, turn the Rotary knob until Color Temperature is highlighted. Next, follow steps 2 - 7 under Color Temperature on the next page.

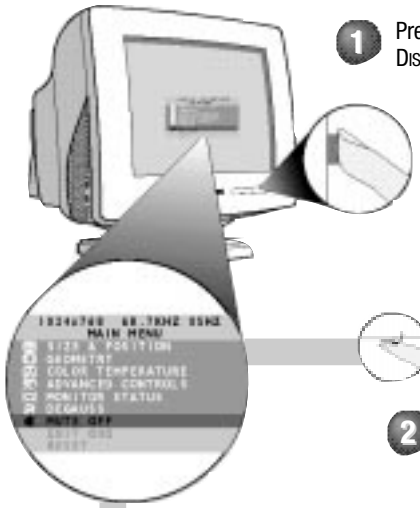
. . . to select the other preset setting (9300° K or 6500° K), press the OSD button and repeat steps 2 -5.

How to Use the On Screen Display (OSD)

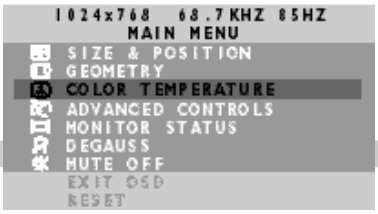
Color Temperature window

User 1 / User 2

User 1 and User 2 allow you to individually set the mixture of red, green, and blue that establishes the color balance on your monitor's screen. You can set up to two presets, then select between them for different tasks. You can only use one preset at a time

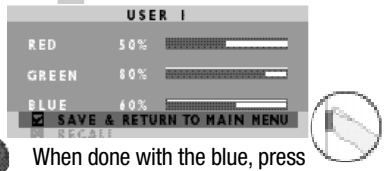


1 Press the On Screen Display button.

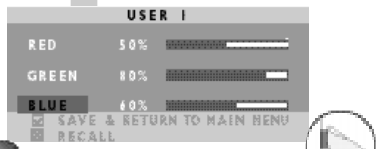


2 Turn the Rotary knob until the Color Temperature window is highlighted. Next, press the On Screen Display button.

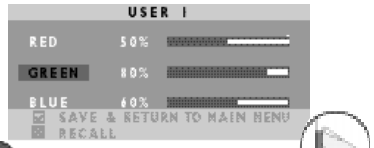
3 Turn the Rotary knob until User 1 is highlighted. *Note: a checkmark appears beside the current selection.*



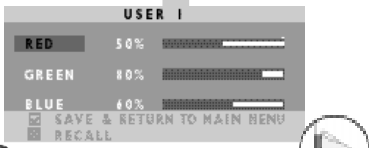
7 When done with the blue, press the On Screen Display button to save the changes. Next, see Smart Help below for options.



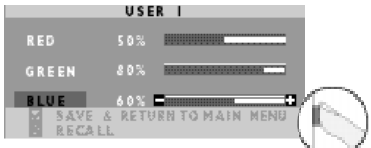
6 When done with green, press the On Screen Display button. Blue will be highlighted.



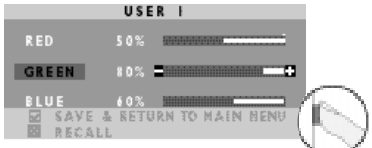
5 When done with red, press the On Screen Display button. Green will be highlighted.



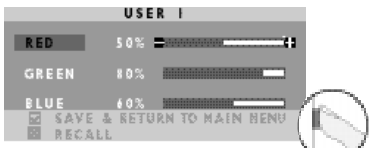
4 First, press the On Screen Display button. Red will be highlighted.



Next, to adjust the blue, press the On Screen Display button again. Then, turn the Rotary knob to increase or decrease the blue.



Next, to adjust the green, press the On Screen Display button again. Then, turn the Rotary knob to increase or decrease the green.



Next, to adjust the red, press the On Screen Display button again. Then, turn the Rotary knob to increase or decrease the red.

Smart Help

After returning to Color Temperature . . .

. . . to continue to User 2, turn the Rotary knob until User 2 is highlighted. Then, press the On Screen Display button and follow steps 4 - 7.

. . . to continue to the Main Menu, press the On Screen Display button once more after completing step 7 above. Now, to select another window from the Main Menu – for example, Geometry – turn to the next page and follow steps 2a - 5c.

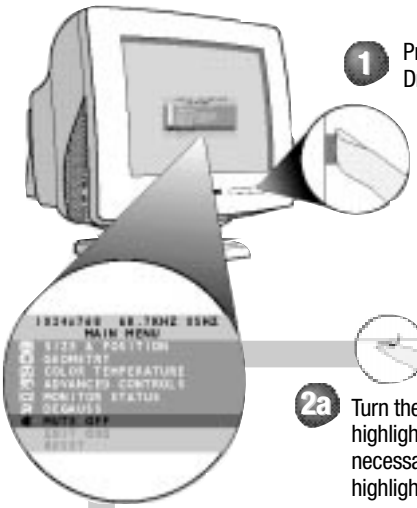
. . .to exit the On Screen Display completely, press the On Screen Display button twice more after completing step 7 above.

How to Use the On Screen Display (OSD)

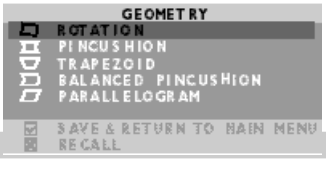
Geometry window

Rotation, Pincushion, Trapezoid, Balanced Pincushion, Parallelogram

Follow the steps below to adjust any of the five preset options (Rotation, Pincushion, Trapezoid, Balanced Pincushion, or Parallelogram). You can make individual adjustments to each of the preset options. *Note: use these features only when the picture is not square.*

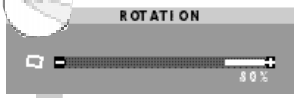


1 Press the On Screen Display button.



2a Turn the Rotary knob until the Geometry window is highlighted. Next, press the On Screen Display button. Then, if necessary, turn the Rotary knob until Rotation icon is highlighted.

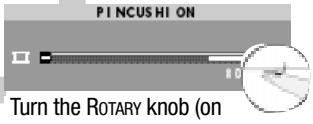
2b Press the On Screen Display button. Then, turn the Rotary knob to adjust the rotation.



2c When done, press the On Screen Display button to save the change and return to Geometry window.

5a **5b** **5c** To select Balanced Pincushion or Parallelogram, turn the Rotary knob until Balanced Pincushion or Parallelogram icon is highlighted. Next, press the On Screen Display button. Then follow steps 4b and 4c to make the appropriate changes.

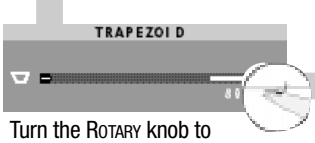
3a To select Pincushion, turn the Rotary knob until Pincushion is highlighted. Next, press the On Screen Display button.



3b Turn the Rotary knob (on the lower right-hand corner of the monitor) to adjust the pincushion.

3c When done, press the On Screen Display button. This will save the change and return the screen to Geometry window.

4a To select Trapezoid, turn the Rotary knob until Trapezoid icon is highlighted. Next, press the On Screen Display button.



4b Turn the Rotary knob to adjust the trapezoid.

4c When done, press the On Screen Display button. This will save the change and return the screen to Geometry window.

Smart Help

To exit Geometry Controls . . .

. . . but continue to another window, press the On Screen Display button when "Save" is highlighted. Next, turn the Rotary knob until the desired window – for example – Size & Position – is highlighted. Now, turn to Size & Position on the next page and follow the instructions, starting with step 2.

. . . completely, press the On Screen Display button twice. The On Screen Display disappears. All changes will be saved.

To make changes to one item, follow the steps for that item. Then, follow **"To exit Geometry Controls . . ."**

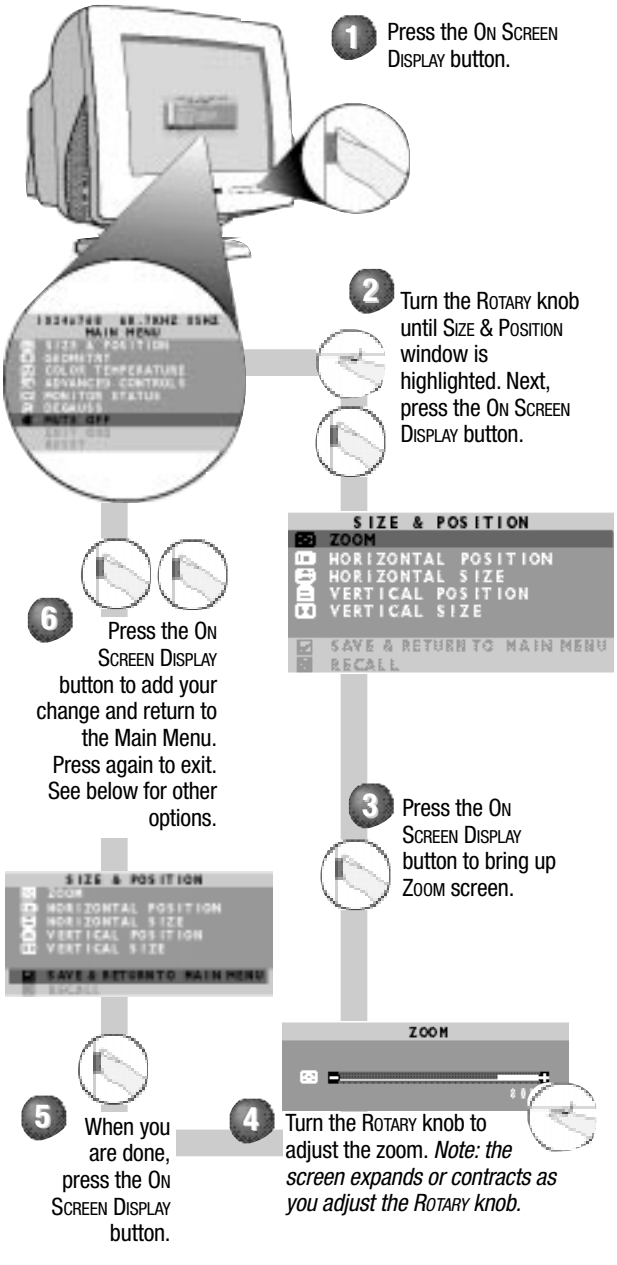
To return to factory presets, see "To Reset the OSD" on page 15.

How to Use the On Screen Display (OSD)

Size & Position window

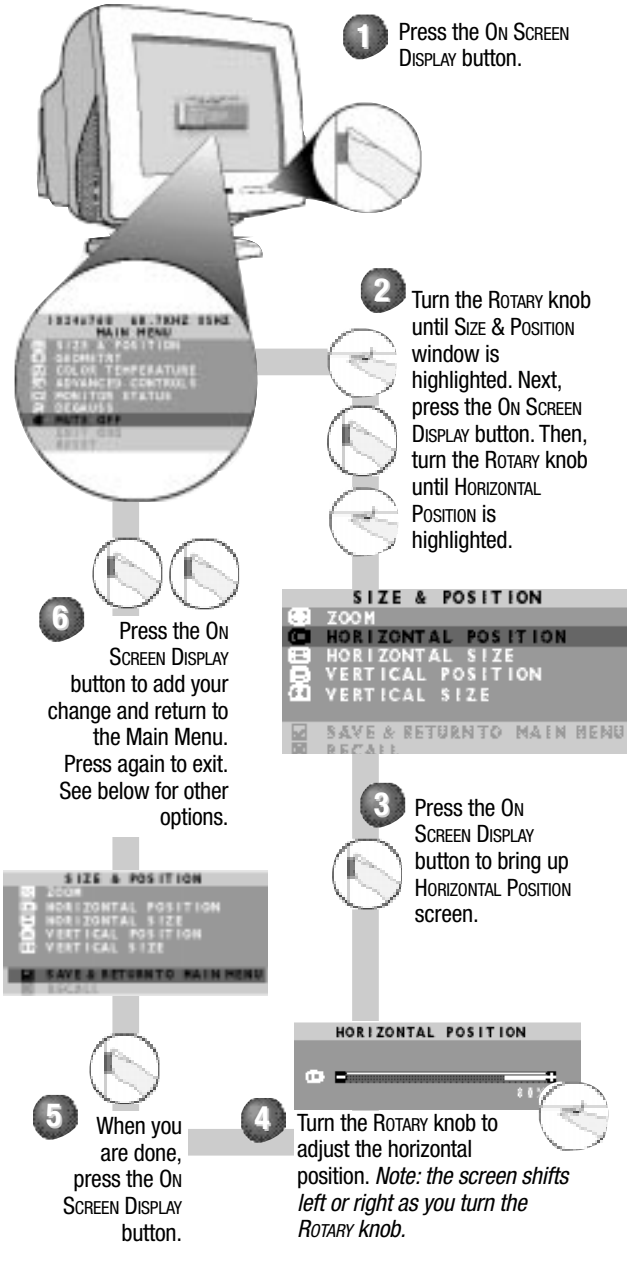
Zoom

Zoom allows you to adjust the image on your screen, both enlarging it and reducing its overall size. To zoom your screen in or out, follow the steps below.


1 Press the On Screen Display button.
2 Turn the Rotary knob until Size & Position window is highlighted. Next, press the On Screen Display button.
SIZE & POSITION
ZOOM
HORIZONTAL POSITION
HORIZONTAL SIZE
VERTICAL POSITION
VERTICAL SIZE
SAVE & RETURN TO MAIN MENU
RECALL
3 Press the On Screen Display button to bring up Zoom screen.
ZOOM
4 Turn the Rotary knob to adjust the zoom. Note: the screen expands or contracts as you adjust the Rotary knob.
5 When you are done, press the On Screen Display button.
6 Press the On Screen Display button to add your change and return to the Main Menu. Press again to exit. See below for other options.

Horizontal Position

Horizontal Position shifts the image on your screen either to the left or right. Use this feature if your image does not appear centered.


1 Press the On Screen Display button.
2 Turn the Rotary knob until Size & Position window is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob until Horizontal Position is highlighted.
SIZE & POSITION
ZOOM
HORIZONTAL POSITION
HORIZONTAL SIZE
VERTICAL POSITION
VERTICAL SIZE
SAVE & RETURN TO MAIN MENU
RECALL
3 Press the On Screen Display button to bring up Horizontal Position screen.
HORIZONTAL POSITION
4 Turn the Rotary knob to adjust the horizontal position. Note: the screen shifts left or right as you turn the Rotary knob.
5 When you are done, press the On Screen Display button.
6 Press the On Screen Display button to add your change and return to the Main Menu. Press again to exit. See below for other options.

Smart Help

To make other changes in the Size & Position window . . .

. . . after returning to the Size & Position window [but before press the On Screen Display (OSD) button in step 6], turn the Rotary knob until another feature – for example, Horizontal Position – is highlighted. Next, follow steps 2 - 6 under Horizontal Position.

. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, Horizontal Position.

Smart Help

To make other changes in the Size & Position window . . .

. . . after returning to the Size & Position window [but before press the On Screen Display (OSD) button in step 6], turn the Rotary knob until another feature – for example, Horizontal Size – is highlighted. Next, follow steps 2 - 6 under Horizontal Size.

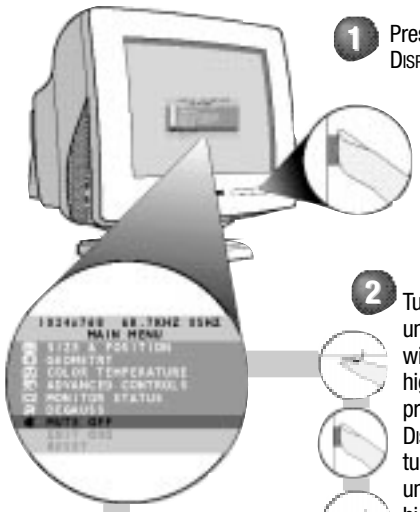
. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, Horizontal Size.

How to Use the On Screen Display (OSD)

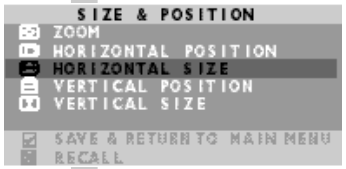
Size & Position window

Horizontal Size

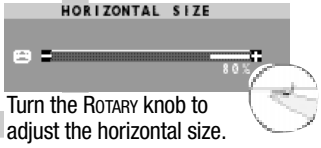
Horizontal Size expands or contracts the image on your screen, pushing it out toward the left and right sides or pulling it in toward the center.



1. Press the On Screen Display button.
2. Turn the Rotary knob until Size & Position window is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob until Horizontal Size is highlighted.



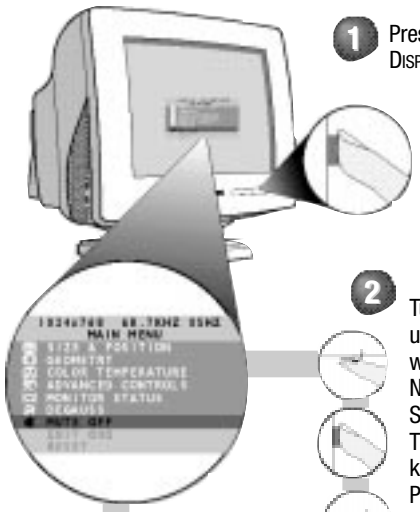
3. Press the On Screen Display button to bring up the Horizontal Size screen.



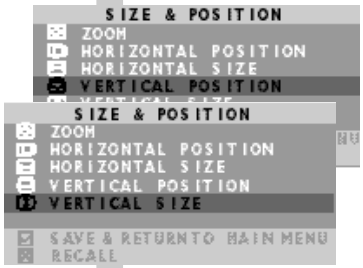
4. Turn the Rotary knob to adjust the horizontal size. *Note: the screen expands or contracts as you turn the Rotary knob.*
5. When you are done, press the On Screen Display button.
6. Press the On Screen Display button to add your change and return to the Main Menu. Press again to exit. See below for other options.

Vertical Position Vertical Size

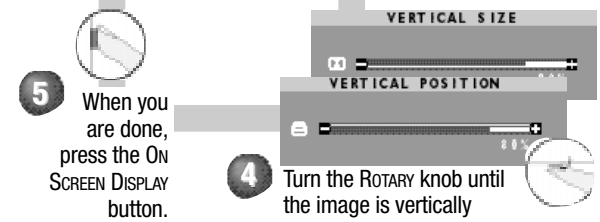
Vertical Position adjusts the image on your screen either up or down. Use this feature if your image does not appear centered. Vertical Size expands or contracts the image on your screen, pushing it out toward the top and bottom of pulling it in toward the center.



1. Press the On Screen Display button.
2. Turn the Rotary knob until Size & Position window is highlighted. Next, press the On Screen Display button. Then, turn the Rotary knob until Vertical Position or Vertical Size is highlighted.



3. Press the On Screen Display button to bring up the Vertical Position or Vertical Size screen.



4. Turn the Rotary knob until the image is vertically balanced or the vertical size you want.
5. When you are done, press the On Screen Display button.
6. Press the On Screen Display button to add your change and return to the Main Menu. Press again to exit. See below for other options.

Smart Help

To make other changes in the Size & Position window . . .

. . . after returning to the Size & Position window [but before press the On Screen Display (OSD) button in step 6], turn the Rotary knob until another feature – for example, Vertical Position – is highlighted. Next, follow steps 2 - 6 under Vertical Position.

. . . after you have exited completely, press the OSD button and follow the steps under that feature, for example, Vertical Position.

Smart Help

To make other changes in the Main Menu . . .

. . . after returning to the Main Menu [but before press the On Screen Display (OSD) button a second time in step 6], turn the Rotary knob until another feature is highlighted. Next, turn to the page for that feature and follow the steps.

. . . after you have exited completely, press the OSD button and follow the steps under that feature.

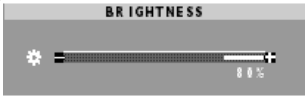
How to Use the On Screen Display (OSD)

Save, Cancel, EXIT OSD, and RESET

Save & Recall From a window

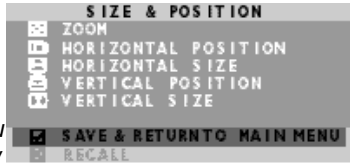
There are three ways to save your changes: by pressing the Front Panel Button, by selecting Save from the On Screen Display, or by letting the On Screen Display time out. Each method saves the changes you have made in a particular window.

1 For example, to make a change in the brightness, press the Brightness button on the front panel, make your change, then press the Brightness button again. (See page 4 for details.) You can also let the display time out and the change will be saved. Note: Brightness, Contrast, and Volume do not have a Save menu selection.



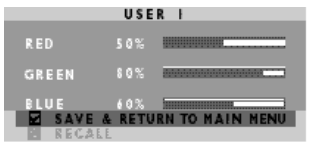
To cancel a change made in the Brightness, Contrast, and Volume windows individually, you must reenter each window and change the setting.

2 In some windows (Size & Position and Geometry), you can save all your changes at once. In the Size & Position window, you can make changes to each of the five items. When you are done, highlight the Save item and press the On Screen Display button. (See pages 13 - 14 for details.) You can also let the display time out and the change will be saved.



To cancel a change made in the Size & Position window, you can select Cancel from the On Screen Display. If you have made a change to only one item – for example, Zoom – then only Zoom will be changed back to the previous setting. If more than one item has been changed, but not saved individually, then all the items changed will be returned to their previous settings. For example, if you made changes to Zoom, Horizontal Size, and Vertical Position and did not save them individually, all three will be changed back when you select Cancel.

3 In some windows (Advanced Controls and Color Temperature), only individual saves are possible. For example, in the Color Temperature window, if you select User 1 and make changes (See page 11 for details.), you must either save or cancel those changes before moving on. While you could wait for the User 1 window (below) to time out, it is not recommended. Since you have not formally saved this change as your selection, the next time you go into the Color Temperature window, the screen will change to selection (User 1, User 2, 9300˚ K, or 6500˚ K) last stored by using Save. A checkmark appears beside that selection.



To cancel a change made in Color Temperature (or Advanced Controls), select Cancel from the on screen display. Only the last item changed will be changed back. All other items will remain unchanged.

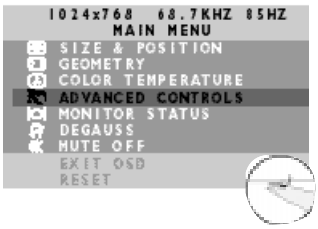
Exit OSD & Reset from the OSD

Exiting from the On Screen Display removes the On Screen Display from the monitor screen. Resetting from the On Screen Display returns everything in all the windows to factory presets.

To Exit the entire On Screen Display

1 When you have finished work in any of the windows of the Main Menu (even selecting Mute On / Mute Off), you will return to the Main Menu and Exit OSD will be highlighted. To exit, simply press the On Screen Display button.

You can, however, use the Rotary knob and scroll to another menu item, for example, Advanced Controls. When Advanced Controls is highlighted, press the On Screen Display button and that window will replace the Main Menu. You can now make changes in that window. When done, you will, again, return to the Main Menu and Exit OSD will be highlighted



Reset Entire On Screen Display

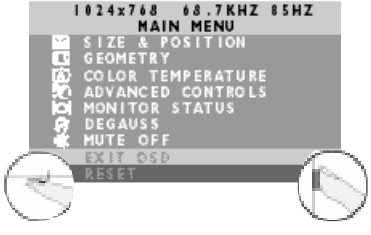
1 Selecting Reset from the Main Menu resets ***all*** the changes you have made in ***all*** the windows of the Main Menu. For example, if the language (See Language, page 7.) has been changed, it is taken back to English.

Use this feature only when you want to return all your changes back to their original settings.

Exiting Brightness, Volume, & Contrast

If you push the Volume, Brightness, or Contrast button to exit (See steps 3 on pages 4 and 5.) and find yourself in the Main Menu, follow the steps below.

1 Turn the Rotary knob until Exit OSD is selected, then press the On Screen Display button.



2 Always exit the Volume, Brightness, or Contrast On Screen Displays by pressing the Volume, Brightness, or Contrast button (steps 3 on pages 4 and 5).

ADDITIONAL HOOK UP OPTIONS

AUDIO AND USB SET UPS

MICROPHONE AND EARPHONES JACKS

In addition to built-in speakers and microphone, you can connect this monitor to optional earphones and a microphone. The jacks are on the left side of the monitor.

To use the microphone with your computer or an amplifier, make the connections shown below.

Note: When the earphones are plugged in, there will be no sound from the built-in speakers.

MICROPHONE AND AUDIO-IN JACKS

A microphone jack is on the back of the monitor. Use it and the supplied cable to connect your monitor to your computer or an amplifier (if either has the right type of jack).

On the back of this monitor there is also an audio-in jack. Use it and the supplied cable to connect your monitor to your computer or an amplifier (if either has the right type of jack).

See page 2 for more detailed illustrations of the jacks' locations.

Refer to the owner's manuals included with your earphones and microphone for a detailed guide to setting up these items.

USB CONNECTIONS (OPTIONAL)

USB (Universal Serial Bus) is an innovation in connecting your IBM-compatible computer to your monitor. By using the USB, you will be able to connect your keyboard, mouse, printer, and other peripherals to your monitor instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. Plus, you will have true plug-and-play capability. While the software is still being developed, Philips has included the hardware so you will be ready to take advantage of this next generation in computer development.

For an IBM-compatible Computer:

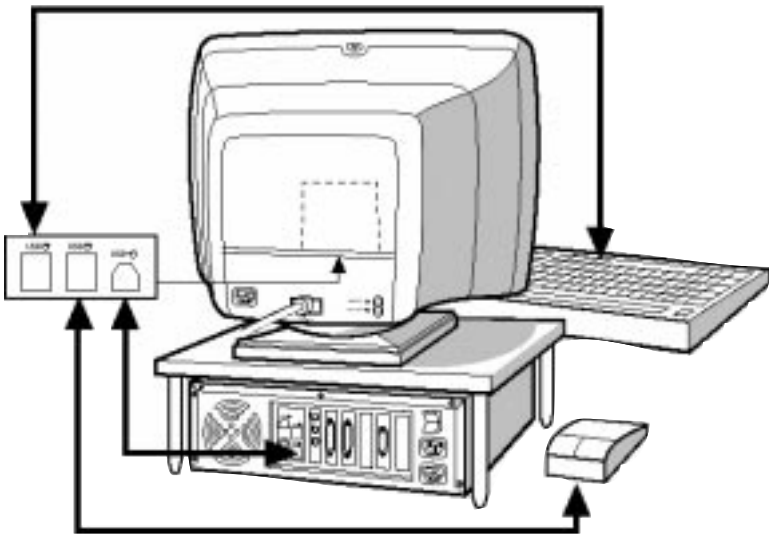
1. Turn off the computer.

2.. Connect the (optional) USB Hub and cable to the computer and to the monitor. (Computer must have a USB port.)

3. Connect the power cable.j

4. Turn on the monitor. Then turn on the computer.

5. With the installation of the correct software, you will be able to connect specially-made peripherals to the monitor.



Refer to the "Setting Up your Philips monitor" foldout for a more detailed guide to setting up your monitor.

Automatic Power Savings & Preset Resolution Modes

If you have VESA's DPMS compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. If input from a keyboard, mouse, or other device is detected, the monitor automatically "wakes up." The table at left shows the power consumption and signalling of this automatic power-saving feature. To turn this feature on and off, see page 7. The table at right shows the 9 factory preset resolution modes. The maximum number of modes is 13. This leaves room for additions.

Power Management Definition						
VESA's mode	Video	H-sync	V-sync	Power used	Power saving(%)	LED color
ON	Active	Yes	Yes	< 110W	0%	Green
Stand-by	Blanked	No	Yes	< 15W	86%	Yellow
Suspend	Blanked	Yes	No	< 15W	86%	Yellow
OFF	Blanked	No	No	< 5W	95.6%	Amber

This monitor is Energy Star compliant and power management compatible.

AS AN ENERGY STAR PARTNER, PHILIPS HAS DETERMINED THAT THIS PRODUCT MEETS THE ENERGY STAR GUIDELINES FOR ENERGY EFFICIENCY.
The proper operation of the function requires a computer with VESA DPMS power management capabilities. When used with a computer equipped with VESA DPMS, the monitor is Energy Star compliant.

Factory Preset Resolution Modes				
Mode	Resolution	H. Freq. (Khz)	V. Freq. (Hz)	Standard
1	640 x 400	31.5	70	VGA
2	640 x 480	31.5	60	VGA
3	640 x 480	43.3	85	VESA/85
4	800 x 600	46.9	75	VESA/75
5	800 x 600	53.7	85	VESA/85
6	1024 x 768	60	75	VESA/75
7	1024 x 768	68.7	85	VESA/85
8	1280 x 1024	80	75	VESA/75
9	1280 x 960	86	85	VESA/85

Glossary

Here are a few definitions that may help you.

Brightness	Refers to how light or dark the overall screen is.
Color Temperature	A term used to refer to the color balance, uniformity, and saturation settings on your monitor screen. Color (even white, gray, and black) on your screen is achieved by blending (or balancing) three primary colors: red, green, and blue. As you increase or decrease any one of these colors, the color temperature changes. For example, at 9300° K, you are using more blue in your color temperature; therefore, your screen will be saturated with more blue and should appear uniformly "bluer" from one side of the screen to the other. At 6500° K, you are using more red in your mixture. True color balance is achieved when a gray object shows no traces of either red, green, or blue, regardless of the brightness of the image.
Contrast	Refers to the sharpness of objects on the screen and the ability to easily distinguish one from the other.
Degauss	The process by which metal parts of the screen are demagnetized in order to reduce screen distortion and color impurity.
DDC	(Display Data Channel) is a signaling standard established to help the performance of personal computers. In order to use this function, your computer must be designed for DDC. There are several types of DDC. Most computer monitors are designed for DDC1 and DDC2 Level B (DDC1 /2B).
Geometry	A set of controls that allows you to adjust the alignment of the picture on the monitor screen. The goal is to "square up" the picture. This is done by adjusting such items as balanced pincushion, pincushion, parallelogram, rotation, and trapezoid.
Moire	A fringe pattern caused by the interference between two superimposed line patterns.
Noise	Term used to refer to interference with the monitor's picture.
USB	Universal Serial Bus. A way to connect your IBM-compatible computer, monitor, and peripherals for true Plug-and-Play functions. This is an emerging technology.

Additional information

Coming to Terms with this Book

Index

6500˚K 10
9300˚K 10
Audio Controls 5
Audio in jack 2, 16
Automatic Power Saving 7
Balanced Pincushion 12
Brightness 4
Built-in microphone 2
Cable Cover 2
Cancel 15
Color Temperature . . . . . 3, 10 -11
Contrast 4
DDC1 / 2B 8
Degauss 6
Description of controls 2, 3
DTP 10
Earphones jack 2, 16
End-of-life disposal 1
Exit OSD 15
Features 1
Geometry Controls 3, 12
Glossary 17
Hook Ups . . . . . Set Up Guide, 16
Horizontal Position 13
Horizontal Size 14
Language 7
LED 2
Main Controls 3, 4-5
Maintenance 1
Microphone jacks 2, 16
Moire 9
Monitor cable plug 2
Monitor Status 6
Mute 3, 5
On Screen Display 2
OSD button 2
Parallelogram 12
Pedestal 2
Pin Assignment 18
Pincushion 12
Power button . . . . . Set Up Guide, 2
Power plug . . . . . Set Up Guide, 2
Power Saving 7
Reset 15
Resolution Modes 17
Rotary knob 2
Rotation 12
Safety precautions 1
Save 15
Size & Position . . . . . 3, 13 - 14
Speakers 2
Specifications 18
Sync Input Select 9
Trapezoid 12
Troubleshooting . . . . . Set Up Guide, 19
USB hub 2, 16
USB set up 16
User 1, User 2 11
Vertical Position 14
Vertical Size 14
Video Input 13
Volume 5
Warranty (Appendix) 60
Zoom 13

Specifications

General

CRT

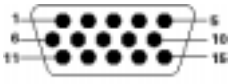
Screen size	:17" (43.2 cm) flat & square
Viewable Image Size (VIS)	:16.0"
Focusing method	:Dynamic focus
Dot pitch	:0.22 mm (horizontal)
Phosphor	:P22 or equivalent, medium short persistence
Screen treatment	:Anti-glare, anti-static
Display area	
Factory preset	:306 mm (H) x 230 mm (V)
Maximum usable	:325.5 mm (H) x 242 mm (V)
Scanning frequency	
Horizontal (line)	:30-86kHz (AutoScan)
Vertical (frame)	:50-160 Hz (AutoScan)
Input power	:100 - 240 V AC, 50 - 60 Hz
Power consumption	:100 Watt normal, 110 Watt max.
Thermal dissipation	:341.3 BTU normal, 375.4 BTU maximum
Input signal	
Video	:0.7 Vpp, 75 Ohm impedance
Sync	:Separate sync. TTL Composite sync. TTL level Sync on green video
Pedestal	
Tilt	:5° forward, 11° backward
Swivel	:90° left, 90° right
Physical	
Unit dimension (WxHxD)	:417 x 432 x 467 mm (16.54" x 17.14" x 18.53")
Net weight	:18.0 kg (39.6 lbs.)
Operating conditions	
Temperature	:0° C - 40° C
Humidity	:10% - 90%
Storage conditions	
Temperature	:-25° C - 65° C
Humidity	:5% - 95%

Specifications subject to change without notification.

Pin Assignment

The 15-pin D-sub connector (male) of the signal cable:

Pin No.	Assignment
1	Red video input
2	Green video input
3	Blue video input
4	Identical output - connected to pin 10
5	Self test
6	Red video ground
7	Green video ground
8	Blue video ground
9	No pin
10	Logic ground
11	Identical output - connected to pin 10
12	Serial data line (SDA)
13	H. Sync / H+V
14	V. Sync (VCLK for DDC)
15	Data clock line (SCL)



Troubleshooting

Having trouble? Something not working? Before calling for help, try these suggestions.

Having this problem?	Check these items
No Picture (Power LED not lit)	Make sure the Power cable is plugged in the wall and back of the monitor. Power button on top of the monitor should be in the ON position. Disconnect the monitor from the power outlet for about one minute.
No Picture (Power LED is Amber or Yellow)	Make sure the computer is turned on. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. The Energy Saving Feature may be activated. See pages 7 and 17 for details.
No Picture (Power LED is Green)	Make sure the Brightness and Contrast controls are set correctly. See page 4 for details Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. Make sure the computer Power button is on.
Screen shows when you turn on the monitor.	Make sure the monitor cable is properly connected to your computer. See Setting Up Guide. Check to see if the monitor cable has bent pins. Make sure the computer is turned on
No Color or intermittent Black-and-White	If you are using a non-VESA-DDC standard video card, turn the DDC1 / 2B feature Off. See page 8.
Color appears blotchy	The picture may need degaussing. See page 6 for details. Remove any nearby magnetic objects. Face the monitor East for best picture quality.
Missing one or more colors	Check user settings of Color Temperature. See pages 10 and 11 for details. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. Adjust Sync Input Select. See page 9 for details.
Dim Picture	Adjust the Brightness and Contrast controls. See page 4 for details. Check your video card and the manual instructions for it. It may be a non-VESA-DDC Standard card. Adjust Sync Input Select. See page 9 for details.
Picture is too large or too small	Adjust the Horizontal and/or Vertical Size. See pages 13 and 14 for details. Adjust the Zoom. See page 13 for details.
Edges of the picture are not square	The geometry controls require adjusting. See page 12 for details.
Picture has a double image	Eliminate the use of a video extension cable and/or video switch box. Face the monitor East for best picture quality.
Picture is not sharp	Check to make sure Moire is switched off. See page 9. Adjust Sync Input Select. See page 9 for details.
No Audio	Make sure mute is not activated. See page 5 for details. Make sure the Audio-in cable is securely plugged into the monitor and the audio source. See pages 2 and 16 for details.
Unstable Picture	Increase your refresh rate. Consult your computer manual for details.
Windows '95 cannot find your video card	Select "Super VGA" under Standard Display Types, or contact your video card manufacturer for the right drivers.

For further assistance, contact Philips at (800) 835-3506 or (423) 475-0280.